Block Schedule Overview for 8th Grade
Teacher: Dana Phillips
2011 – 2012

Block: Anatomy
Date: August 7-September 30
Description: In anatomy, students study the muscular, skeletal, digestive, respiratory, and circulatory systems, through the study of the human form and function and the interplay of the organs throughout the body. The block seeks to balance solid, fundamental scientific understanding with an appreciation for the artistry of form and movement within the body of the human. A study of these systems, each with its own special function, allows for discussion of specific issues of health and hygiene.

Block: Meteorology
Date: October 3-October 28
Description: The meteorology block begins with the study of the development of the barometer and about barometric pressure as the foundation for understanding weather. The block continues with the study of cooling and warming trends in the earth's atmosphere and hydrosphere that lead to such phenomena as "fronts", sea breezes and land breezes. Additionally, the phenomena of major storms such as hurricanes, tornadoes and waterspouts, and their role as "pressure regulators" in the world's weather system are also studied.

Block: World History I
Date: October 31-December 1
Description: Students begin with a study of revolutionary American and European history. While the lives of Benjamin Franklin, George Washington, and Abraham Lincoln will form the foundation of our work, we will also examine the economic forces and philosophical movements that led to both the break with England and the secession of the Southern states. The Declaration of Independence and the Constitution will be studied as documents which are no less relevant today than at the time of their creation. Students will also have a working understanding of world geo-political regions, and will identify and map the basic geo-political boundaries of continents and entities. Additionally, students will give written and oral reports on historical subjects.

Block: Geometry
Date: December 2-December 15
Description: Students will practice the construction of perpendicular bisectors, parallel lines, and polygons, as well as, the bisection of angles. Students will extend their geometrical understanding into three dimensions by constructing platonic solids with paper, compass, and straightedge and then in clay. Simple geometric theorems will also be presented and worked through.

Block: Chemistry
Date: January 3-January 24
Description: The chemistry block focuses on the characteristic properties of matter and the relationship of these properties to their structure and behavior. Students will: model and label the structure of an atom (i.e. protons, neutrons, electrons); use the periodic table, to draw Bohr models for elements and predict their ionic charges; demonstrate how like and unlike charges interact; classify materials and identifying unknown materials based on density, solubility, conductivity, pH, freezing point and boiling point; illustrate the changes of state in matter at the atomic or molecular level. Additionally students will be able to explain the roles of organic molecules in living organisms and diagram the flow of organic compounds (stored energy) though an ecosystem.

Block: World History II
Date: January 27-Febrauary 24
Description: The history curriculum continues and addresses the inner changes going on within the students and the need to develop social forms and accommodate their emerging individuality. The students go on to study the Industrial revolution and end up in present day. Along the way the class looks at biographies of such representative people as George Washington Carver, Martin Luther King Jr. and Mother Theresa and such events as the American Civil War, the Russian Revolution, World War I and II and current events. Students will give written and oral reports on historical subjects.

Block: Physics
Date: February 27-March 30
Description: The physics block is divided into five sections: sound, heat, magnetism, electricity, and light. Through the physics curriculum, students learn to observe a phenomenon during an experiment and write about it the following day. The goal is to present physical phenomena to the students and to train their skill in accurate observation. Students learn that only after careful observations are made can valid judgments be formed. Next, they develop the skill to write these observations with objective and clear thoughts.

Block: Geology
Date: April 9-May4
Description:
The study of geology and mineralogy begins with a cross-section map of the United States, noting the physical features of the landscape. The students study how rocks are formed: sedimentary by the seas, igneous through fire, and metamorphic through the internal movement of the earth. The study of geology also includes aspects of erosion, glaciers, and mountain formation.

Block: Students Year End Reports and Presentations
Date: TBD
Description: The eighth grade project is a year-long project that consists of three parts: a written research paper, the creation of a physical "product" and an oral presentation. Examples of the product of these projects include building a Tesla Coil, making a guitar, or writing and performing a monologue.

Block: Class Play
Date: TBD
Description: The eighth grade class will be performing either *The Tempest* or *Midsummer Night's Dream* by William Shakespeare.

Block: Class Trip
Date: TBD
Description: Class will travel to Washington, D.C. to learn about the history of our country's founders and the role of present-day policymakers with visits to some of the most historical sites in our nation's capital.